

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

02/20/2003

McDERMOTT, WILL & EMERY 600 13th Street, N.W. Washington, DC 20005-3096

EXAMINER PHAM, LY D				
2818	365-158000			

DATE MAILED: 02/20/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050 810	01/18/2002	Hideto Hidaka	57454-322	6534

TITLE OF INVENTION: THIN FILM MAGNETIC MEMORY DEVICE CAPABLE OF CONDUCTING STABLE DATA READ AND WRITE OPERATIONS

APPLN. TYPE SMALL ENTITY		ISSUE FEE	ISSUE FEE PUBLICATION FEE		DATE DUE
nonprovisional	NO	\$1300	\$300	\$1600	05/20/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE

Commissioner for Patents Washington, D.C. 20231 (703)746-4000

Fax

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for

maintenance fee notification CURRENT CORRESPONDENCE 75	1S. 1E ADDRESS (Note: Legibly mar 1690 02/20/2003 WILL & EMERY W.	k-up with any corrections or use E		Note: A certifica Fee(s) Transmi accompanying p formal drawing, I hereby certify United States Pc envelope address transmitted to th	ate of mailing can only be used for that. This certificate cannot capers. Each additional paper, smust have its own certificate of no Certificate of Mailing or Transport that this Fee(s) Transmittal is ostal Service with sufficient postal sed to the Box Issue Fee address e USPTO, on the date indicated be ATTORNEY DOCKET NO.	or domestic mailings of the be used for any other such as an assignment or nailing or transmission. smission being deposited with the ge for first class mail in an above, or being facsimile
10/050,810	01/18/2002		Hideto Hidaka		57454-322	6534
TITLE OF INVENTION: T					LE DATA READ AND WRITE (
APPLN, TYPE	SMALL ENTITY	ISSUE FEE	PUBL	ICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	МО	\$1300		\$300	\$1600	05/20/2003
EXAMI	NER	ART UNIT	CLASS-SUBC	LASS		
PHAM,		2818	365-1580			
Address form PTO/SB/1 "Fee Address" indicate PTO/SB/47; Rev 03-02 Number is required. 3. ASSIGNEE NAME AND	ion (or "Fee Address" Indoor more recent) attached. D RESIDENCE DATA To an assignee is identified by to the USPTO or is being	Use of a Customer D BE PRINTED ON THE pelow, no assignee data we g submitted under separate	or agents OR, single firm (h attorney or ag registered pate is listed, no nar PATENT (print ill appear on the e cover. Completi		the name of a per a registered less of up to 2 lents. If no name lents assignee data is only appropriation and a substitute for filing an assignee data is only appropriation.	te when an assignment has gnment.
Please check the appropriate				individual 🔾	corporation or other private g	roup entity government
4a. The following fee(s) are	enclosed:		yment of Fee(s):			
☐ Issue Fee				it of the fee(s) is en		
☐ Publication Fee		•	•	d. Form PTO-2038	by charge the required fee(s), or	credit any overnavment to
Commissioner for Patents is		Depos	it Account Numb	er	(enclose an extra copy of this pusly paid issue fee to the applicat	form).
(Authorized Signature) NOTE; The Issue Fee an other than the applicant;	d Publication Fee (if rec a registered attorney or	(Date) quired) will not be accept agent; or the assignee of	ted from anyone			
other than the applicant; interest as shown by the re This collection of informs obtain or retain a benefit application. Confidentialit estimated to take 12 minu completed application for case. Any comments on suggestions for reducing Patent and Trademark Off NOT SEND FEES OR Commissioner for Patents. Under the Paperwork Recollection of information.	ation is required by 37 C by the public which is to y is governed by 35 U.S.O. test to complete, includin m to the USPTO. Time the amount of time you this burden, should be sice, U.S. Department of ince, U.S. Department of COMPLETED FORM, Washington, DC 20231.	FR 1.311. The information file (and by the USPT) of file (and by the USPT) of the USPT) of the USPT, and the USPT,	on is required to O to process) an This collection is disubmitting the on the individual his form and/or ion Officer, U.S. D.C. 2023 i. D. SS. SEND TO:		·	



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/050,810	01/18/2002	Hideto Hidaka	57454-322 6534		
_	590 02/20/2003		EXAMINER PHAM, LY D		
McDERMOTT,	WILL & EMERY				
600 13th Street, N Washington, DC 2			ART UNIT	PAPER NUMBER	
			2818		
			DATE MAILED: 02/20/2003		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 0 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 0 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



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10/050,810 01/18/2002		01/18/2002	Hideto Hidaka	57454-322	6534		
7590 02/20/2003					EXAMINER		
McDERMOTT, WILL & EMERY 600 13th Street, N.W.				PHAM, LY D			
	Washington, DC 2		3096		ART UNIT	PAPER NUMBER	
UNITED STATES					2818		
				DA	TE MAILED: 02/20/2003		

Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

							
• •	Application	No.	Applicant(s)				
Notice of Allowability	10/050,810		HIDAKA, HIDETO				
Notice of Anowability	Examiner		Art Unit				
	Ly D Pham		2818				
Th MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS I herewith (or previously mailed), a Notice of Allowance (PTOL-8 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT of the Office or upon petition by the applicant. See 37 CFR 1.3	S (OR REMAINS 5) or other appro RIGHTS. This a	 CLOSED in this apprinte communication polication is subject to 	olication. If not include will be mailed in due	ed course. THIS			
 This communication is responsive to 16 January 2002. The allowed claim(s) is/are 7-12. The drawings filed on 18 January 2002 are accepted by Acknowledgment is made of a claim for foreign priority uan All b) Some* c) None of the: Certified copies of the priority documents hat Copies of the certified copies of the priority documents hat 	inder 35 U.S.C. § ave been received ave been received	i. I in Application No		ation from the			
International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 5. Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). (a) The translation of the foreign language provisional application has been received. 6. Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted							
below. Failure to timely comply will result in ABANDONMENT of the complete of	bmitted. Note the	attached EXAMINER	S'S AMENDMENT or I				
8. CORRECTED DRAWINGS must be submitted. (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No (b) including changes required by the proposed drawing correction filed, which has been approved by the Examiner. (c) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.							
9. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.							
Attachment(s)							
1⊠ Notice of References Cited (PTO-892) 3□ Notice of Draftperson's Patent Drawing Review (PTO-948) 5⊠ Information Disclosure Statements (PTO-1449), Paper No. 7□ Examiner's Comment Regarding Requirement for Deposit of Biological Material David Neir Supervisory Patent Technology Cent	. <u>3</u> .) ms t Examiner	4☐ Interview Summ 6⊠ Examiner's Ame	al Patent Application of ary (PTO-413), Papel Indment/Comment The ement of Reasons for The properties of the sement of Reasons for The properties of the sement of th	r No			
	2000						

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Art Unit: 2818

DETAILED ACTION

Election/Restrictions

- Claims 1 6 and 13 14 are withdrawn from further consideration pursuant to 37 CFR
 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 5.
- 2 This application is in condition for allowance except the following formal matter.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claims 1 - 6 and 13 - 14 are cancelled for being drawn to non-elected inventions.

Election was made without traverse in Office paper No. 5. Applicant has the right to file divisional applications covering the subject matter of the inventions in claims 1 - 6 and 13 - 14.

Allowable Subject Matter

- 4. Claims 7 12 are allowed.
- 5. The following is an examiner's statement of reasons for allowance:

Application/Control Number: 10/050,810

Art Unit: 2818

The prior arts fail to teach or reasonably suggest a thin film magnetic storage memory device, comprising:

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a plurality of memory cells..., wherein each of said memory cells includes
an access gate ... and
a magnetic storate portion ..., and
said magnetic storage portion includes
       a first magnetic layer ..., and
       a first insulating film ..., said thin film magnetic memory device further
comprising:
               a data line ...;
               a reference data line ...;
               a plurality of dummy memory cells, wherein each of said dummy memory
       cells includes
                       a dummy access gate ..., and
                       a plurality of dummy magnetic storage portions ..., each of said
               dummy magnetic portions includes
                              a third magnetic layer ...,
                              a fourth magnetic layer ...,
                              a second insulating film, and
                              each of said dummy magenetic storage portions ....
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6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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Art Unit: 2818

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's 7.

disclosure.

When responding to the office action, Applicant(s) are advised to provide the examiner 8.

with the page and line numbers in the application and/or references cited to assist the examiner to

locate the appropriate paragraphs.

A shortened statutory period for response to this action is set to expire 3 (three) months 9.

and 0 (zero) day from the date of this letter. Failure to respond within the period for response

will cause the application to become abandoned (see MPEP 710.02(b)).

Any inquiry concerning this communication on earlier communications from the 10.

examiner should be directed to Ly Pham, whose telephone number is 703-305-4862. The

examiner can normally be reached on Monday - Friday from 8:30am to 5:00pm, alternate Friday

off. The examiner's supervisor, David Nelms, can be reached at 703-308-4910. The fax number

for the organization where this application or proceeding is assigned is 703-308-7724.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-308-0956.

Ly Pham

February 12, 2003

Supervisory Patent Examiner

Feshnology Center 2800